

Amendments to the Specification

~~A magnetic field sensitive sensor arrangement comprises~~
~~—a first conductor arrangement with at least two electrical half bridges each having at~~
~~least two bridge branches, at least one of which contains a magnetic field sensitive~~
~~semiconductor element, which sensor arrangement supplies a measurement signal~~
~~depending on the magnetic field strength of a component of a magnetic field at the~~
~~location of at least one of the half bridges, this being referred to as the measurement field~~
~~and being aligned in a measurement direction of the sensor arrangement, and~~
~~—a device which forms the measurement field with a value of its magnetic field strength,~~
~~which depends on the magnetic permeability of a medium that at least partially surrounds~~
~~the sensor arrangement, whereby the measurement signal is a measure of the magnetic~~
~~permeability of the medium.~~
~~—————A simple sensor arrangement for measuring a medium which affects a~~
~~magnetic field is thus provided.~~

~~Fig. 1~~

Consistent with an example embodiment, there is a magnetic-field-sensitive arrangement. The sensor arrangement comprises a first conductor arrangement with at least two electrical half-bridges each having at least two bridge branches. At least one of the two branch bridges contains a magnetic-field-sensitive semiconductor element. The sensor arrangement supplies a measurement signal depending on the magnetic field strength of a component of a magnetic field at the location of at least one of the half-bridges, this being referred to as the measurement field and being aligned in a measurement direction of the sensor arrangement. A device forms the measurement field with a value of its magnetic field strength, which depends on the magnetic permeability of a medium that at least partially surrounds the sensor arrangement, whereby the measurement signal is a measure of the magnetic permeability of the medium. Thus a sensor arrangement for measuring a medium that affects a magnetic field is provided.